

Notice of Allowability

Application No.

10/528,519

Examiner

K. Feggins

Applicant(s)

MORITA ET AL.

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 3/18/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The primary reason for allowance of claims 1-5 is the inclusion of the limitations of a imaging forming apparatus that includes a dyeing layer transfer head and the recording heads are located in equal interval of length P , which is obtained by equally dividing length K of the entire circumference of the recording intermediate belt by n (n is integer), the image formation section is formed, given that the position of a seam of the recording intermediate belt is origin O , to form an image in portions except for portions at origin O and at a distance of $1 \cdot P$, $2 \cdot P$, . . . $(n-1) \cdot P$ from origin O . It is these limitations found in the claims, as they are claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for allowance of claims 6 & 7 are the inclusion of the limitations of an imaging forming apparatus that includes a mark is printed near a seam of the recording intermediate belt, and detection means for detecting the mark is provided. It is these limitations found in the claims, as they are claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for allowance of claim 8 is the inclusion of the limitations of an imaging forming apparatus that includes a recording intermediate belt revolves all the time even when it does not form an image, and a position of a seam of the recording intermediate belt is always detected, and image formation is started based on the

detected results. It is these limitations found in the claims, as they are claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for allowance of claim 9 is the inclusion of the limitations of an imaging forming apparatus that includes before an image formation operation is started, a seam of the recording intermediate belt, which does not have an end obtained by coupling two ends of a belt body of a band shape, is previously stopped at a position near the dyeing layer transfer head of the dyeing layer transfer section. It is this limitation found in the claims, as it is claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for allowance of claim 10 is the inclusion of the limitations of an imaging forming apparatus that includes a positional deviation from designed values of the recording heads in the plurality of the image formation sections are previously measured, and based on the measured results, compensation of recording timings of the recording head is performed so as to absorb the positional deviation from the designed values. It is these limitations found in the claims, as they are claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for allowance of claim 11 is the inclusion of the limitations of an imaging forming apparatus that includes relationships between pressing states of the recording heads of the recording intermediate belt and amounts of shift in recording

positions due to small changes caused by being pressed by the recording heads are previously measured, and based on the measured results, compensation of recording timings of the recording heads is performed. It is these limitations found in the claims, as they are claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for allowance of claim 12 is the inclusion of the limitations of an imaging forming apparatus that includes compensation of recording timings of the recording heads is performed in accordance with amounts of shift in recording positions of the recording heads of the image formation sections corresponding to a change in a rotation rate of the platen drum. It is these limitations found in the claims, as they are claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for allowance of claim 13 is the inclusion of the limitations of an imaging forming apparatus that includes cutting means for cutting the recording paper guided in a different direction from the recording intermediate belt by the separation roller into color images which have been formed, wherein the cutting means is located such that the recording paper bends to an extent to absorb a cutting shock generated when the recording paper is out by the cutting means. It is these limitations found in the claims, as they are claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for allowance of claim 14-16 is the inclusion of the limitations of an imaging forming apparatus that includes a control section for outputting control signals for respectively controlling the image formation sections based on an input image signal which has been input, wherein the control section calculates a processing time of an input image signal which is input for each of images to be formed when images are formed continuously, and, based on the calculated results, sets an order for forming the images. It is these limitations found in the claims, as they are claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for allowance of claim 17 is the inclusion of the limitations of an imaging forming apparatus that includes a control section for outputting control signals for respectively controlling the image formation sections based on an input image signal which has been input, wherein the control section is set to calculate a processing time of an input image signal which is input for each of images to be formed, and to perform a process of an input image signal of an image having a processing time for an input image signal longer than a pre-set reference value when an image formation operation is suspended for radiating heat from a high-temperature state caused by continuously performing image formation operations. It is these limitations found in the claims, as they are claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bouchard et al. (US 6842186 B2) disclose a thermal printer having a plurality of heads that can vary the printed dot size. Taguchi (US 6,704,037 B1) discloses a thermal transfer recording apparatus having an image transfer section having image transfer head which faces the intermediate record support inside of the closed loop. Foster et al. (US 6,908,239 B1) disclose a thermal printer that prevent core set curl in thermal prints.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Communication With The USPTO

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 571-272-2254. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Luu Matthew can be reached on 571-272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kf

 12/6/07
K. FEGGINS
EXAMINER